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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,310	04/20/2004	Manabu Saito	113539.02	2574

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EXAMINER

LEE, SUSAN SHUK YIN

ART UNIT	PAPER NUMBER
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2852

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/827,310

Applicant(s)

SAITO ET AL.

Examiner

Susan S. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-24 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/226305 & 10/366322.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/20/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claims 1-20, 22, and 24 are objected to because of the following informalities:

As to claim 1, lines 16-17, "the optical writing apparatus" lacks antecedent basis.

As to claim 10, lines 8-9, "upstream of a latent image writing position" with respect to what?

As to claim 11, line 2, "the apparatus body" lacks antecedent basis.

As to claim 22, lines, 7-8, "upstream of a latent image writing position" with respect to what?

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe (Japan, 8-123297).

Watanabe discloses an image forming apparatus in Figure 7, recording medium storage section 3a, vertical transport path 3e, ejection unit 6, an image carrier 7, writing section 1, first developer storage space or vessel 11c, second developer storage portion 10a, and window 17 at the boundary (Figure 9). The writing position is where the beam of the writing section 1 contacts the image carrier 7. The instant invention's developer space is read as the entire process cartridge B of Watanabe.

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Aruga et al. (5,729,804).

Aruga et al. discloses a developing housing 220 communicatively connected through mechanism 500 to developer replenishment box 600. Note Figs. 2 & 3, column 6, lines 14-21; column 8, lines 42-53; and column 9, lines 52-67.

Claims 10-13, 16, 19, and 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Sano et al. (US 6,549,737 B2).

The patent to Sano et al. discloses process cartridge U, an image forming unit, figure 1, an image carrying body 42, detachable, figure 4, developing unit 13, developer housing 71 communicatively connected, column 5, lines 33-38, to toner replenishing box 15, detachable, figure 3, and upstream of a latent image writing position (beam from

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writing unit 9 that contacts image carrying body 42), figure 12 and column 5, line 66 - column 6, line 3. As to claim 19, see the relative sizes shown in figure 1.

Claims 10, 15, 16, 20, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuura et al. (US 5,126,799).

The patent to Matsuura et al. discloses latent image forming unit, figure 6, image carrying body 1, developing unit 10, developer housing, no separate reference numeral, communicatively connected by duct 47 to replenishment box 35 integral with waste developer recovery box 36, disposed upstream of image writing position 31. As to claim 20, see the configuration of figure 6.

Claims 10, 11, 13, 16, 17, 20, and 22-24 are rejected under 35 U.S.C. 102 (b) as being anticipated by Watanabe (JP 8-123297 A).

The publication discloses process cartridge B, figure 8 or 9, image carrying body 7, developer housing 10a, communicatively connected by 16, figures 4 and 9, to toner replenishment box 11c, upstream and above latent image writing position L, figure 9, and discharge tray 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe (Japan, 297) in view of Ishikawa (Japan, 10-282853).

Watanabe, as discussed above, differs from the instant invention by not showing the location of the control board.

Ishikawa discloses control/interface board 13, 14 arranged between ejection unit 18 and the optical writing apparatus, Fig. 8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Watanabe by arranging the boards of Watanabe in the location of Ishikawa as a known location in an image forming apparatus and to utilize space in the image forming apparatus.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. in view of Setoriyama (US 5,543,891).

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Sano et al. discussed above, differs from the claimed invention in not disclosing an upper cover for attaching the process cartridge.

Setoriyama discloses cover 4, figure 2, for attaching and detaching process cartridge 11.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an upper cover as taught by Setoriyama with the apparatus of Sano et al. as a known expedient for using a process cartridge.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyasaka et al. (US 6,081,683) in view of Fuji et al. (US 5,315,362).

Miyasaka et al. discloses latent image forming unit, figure 1, image carrying body 10, developing unit 3, intermediate transfer member 4, recording sheet transported from 6 to the upper part, figure 1, developer housing disposed in an upper part of the latent image writing position (beam from writing device 2 contacting the image carrying body 10), figure 1, and differs from the claimed invention in not disclosing a toner replenishment box.

Fuji et al. discloses toner replenishment box 28, 30, 32, 34, communicatively connected, figure 1, to developing housing 4, 6, 8, 10.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a developer replenishment box as taught by Fuji et al. with the apparatus of Miyasaka et al. in order to supply a large volume of developer.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Saito (6,792,230) discloses process cartridge.


Allowable Subject Matter

Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan S. Lee whose telephone number is 571-272-2137. The examiner can normally be reached on Mon. - Fri., 10:30-8:00, Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Art Grimley can be reached on 571-272-2136 or 571-272-2800 (Ext. 52). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Susan S. Lee
Primary Examiner
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